Complete Summary

GUIDELINE TITLE

Evaluation of dyspepsia.

BIBLIOGRAPHIC SOURCE(S)

American Gastroenterological Association medical position statement: evaluation of dyspepsia. Gastroenterology 1998 Mar;114(3):579-81. [189 references] PubMed

COMPLETE SUMMARY CONTENT

SCOPE

DISEASE/CONDITION(S)

Functional dyspepsia, and the major organic diseases causing dyspepsia (i.e., gastroduodenal ulcer, atypical gastroesophageal reflux and gastric cancer)

GUIDELINE CATEGORY

Diagnosis
Evaluation
Management

CLINICAL SPECIALTY

Family Practice
Gastroenterology
Internal Medicine

INTENDED USERS

Physicians

GUIDELINE OBJECTIVE(S)

- To assist the primary care physician, internist, and gastroenterologist with the diagnosis and treatment of new-onset dyspepsia
- To review the available management strategies in the literature and critically evaluate their implications to help develop modern practice guidelines

TARGET POPULATION

Patients with new-onset dyspepsia

INTERVENTIONS AND PRACTICES CONSIDERED

- Differential diagnosis of dyspepsia: clinical history for alarm symptoms (e.g., weight loss, recurrent vomiting, dysphagia, evidence of bleeding or anemia), upper endoscopy, upper gastrointestinal radiographs
- Management options for new-onset dyspepsia:
    1. empiric medical therapy (e.g., an antisecretory or prokinetic drug with any subsequent investigation reserved for failures
    2. immediate diagnostic evaluation in all cases, applying endoscopy preferably
    3. testing for H. pylori infection by serology or urea breath test and reserving endoscopy for positive cases to look for ulcer disease or cancer
    4. testing for H. pylori and treating all positive cases with antibacterial therapy to cure ulcer disease

MAJOR OUTCOMES CONSIDERED

- Symptomatic relief of dyspepsia
- Eradication of H. pylori
- Cure for ulcer disease

METHODOLOGY

METHODS USED TO COLLECT/SELECT EVIDENCE

Hand-searches of Published Literature (Primary Sources)
Hand-searches of Published Literature (Secondary Sources)
Searches of Electronic Databases

DESCRIPTION OF METHODS USED TO COLLECT/SELECT THE EVIDENCE

MEDLINE (U.S. National Library of Medicine, Bethesda, MD) and Current Contents (ISI, Philadelphia, PA) searches were performed up to April 1997 using the MeSH term "dyspepsia." The papers that considered management of dyspepsia were retrieved and reviewed, and their reference lists were checked for additional citations. The authors met to review and synthesize the available data.

NUMBER OF SOURCE DOCUMENTS

Not stated

METHODS USED TO ASSESS THE QUALITY AND STRENGTH OF THE EVIDENCE

Expert Consensus (Committee)

RATING SCHEME FOR THE STRENGTH OF THE EVIDENCE

Not applicable

METHODS USED TO ANALYZE THE EVIDENCE

Systematic Review with Evidence Tables

DESCRIPTION OF THE METHODS USED TO ANALYZE THE EVIDENCE

Not stated

METHODS USED TO FORMULATE THE RECOMMENDATIONS

Not stated

RATING SCHEME FOR THE STRENGTH OF THE RECOMMENDATIONS

Not applicable

COST ANALYSIS

The guideline developer performed a systematic review of published decision analysis where various methods and results of cost analyses were considered in the larger context of decision-making. Refer to the technical companion document for details.

METHOD OF GUIDELINE VALIDATION

External Peer Review

DESCRIPTION OF METHOD OF GUIDELINE VALIDATION

Not stated

RECOMMENDATIONS

MAJOR RECOMMENDATIONS

Management:

Referral for early upper endoscopy is always indicated in older patients presenting with new-onset dyspepsia. This is because the incidence of gastric cancer in the United States and other Western countries increases with advancing age; a threshold of 45 years is recommended. However, in populations where the age-specific incidence of gastric cancer is greater in younger age groups, a lower age threshold should be applied. Patients with alarm symptoms (e.g., weight loss, recurrent vomiting, dysphagia, evidence of bleeding, or anemia) should be referred for prompt endoscopy. Patients whose symptoms have failed to respond to empiric therapeutic approaches described below also should undergo endoscopy.

If endoscopy has been competently performed once, there is no indication to repeat it unless new alarm symptoms have developed that require investigation. After endoscopy, treatment should be targeted at the underlying diagnosis, but the majority of patients will be labeled as having functional (or nonulcer) dyspepsia; these patients may respond to reassurance and explanation followed, if necessary, by a course of antisecretory or prokinetic therapy. Although the role of H. pylori in functional dyspepsia remains uncertain, in those who have documented infection, eradication therapy is reasonable after fully explaining the risks and limitations. In patients with persistent symptoms, other treatments that may be considered include behavioral therapy, psychotherapy, or antidepressant therapy, but these approaches are not of established value.

In younger patients with no alarm features who have not been investigated previously, it is recommended that a locally validated noninvasive H. pylori test (e.g., serology or urea breath test) is undertaken to determine if the patient is infected. A breath test is more costly but has greater accuracy for documenting current H. pylori infection (Agréus & Talley, 1997). If there is documented H. pylori infection, then an empiric trial of anti-H. pylori therapy is recommended (Talley et al., 1998; The European Helicobacter pylori Study Group, 1997). The rationale is that ulcer disease will heal and the ulcer diathesis will be abolished. A follow-up visit is recommended within 4-8 weeks. If symptoms fail to respond or rapidly recur or alarm features develop, then prompt upper endoscopy is indicated. It is unlikely that an early (and hence curable) gastric cancer would progress to advanced cancer within 1-2 months of presentation; hence, follow-up within this time period is recommended.

A trial of noninvasive testing followed by empiric therapy for H. pylori assumes that background prevalence of infection is not universally high and gastric cancer is not common. In regions where there is a high background incidence of gastric cancer, a strategy of H. pylori testing and endoscopy of those who test positive for the infection (to definitely exclude malignancy) may be preferable to a test and treat strategy, although data are unavailable.

In younger patients with no alarm features who are H. pylori negative, it is recommended that a trial of antisecretory therapy (e.g., H2-blocker or proton pump inhibitor) or a prokinetic be prescribed for 1 month (Jones & Baxter, 1997; Velduhyzen van Zanten et al., 1996). If this fails to relieve symptoms, therapy may be switched between the antisecretory and prokinetic classes. If after 8 weeks of therapy symptoms persist or rapidly recur on stopping treatment, then endoscopy is recommended.

CLINICAL ALGORITHM(S)

A clinical algorithm is provided for the management of patients presenting with dyspepsia who have not been previously investigated.

EVIDENCE SUPPORTING THE RECOMMENDATIONS

REFERENCES SUPPORTING THE RECOMMENDATIONS

References open in a new window

TYPE OF EVIDENCE SUPPORTING THE RECOMMENDATIONS

Not specifically stated for each recommendation.

In general, the recommendations are supported by a review of the relevant literature and a critical analysis of all the available decision analyses and trials.

BENEFITS/HARMS OF IMPLEMENTING THE GUIDELINE RECOMMENDATIONS

POTENTIAL BENEFITS

- Prompt diagnosis of conditions associated with dyspepsia
- Effective treatment of dyspepsia
- Earlier detection of gastric cancer

Subgroups Most Likely to Benefit:

Patients with alarm symptoms (e.g., weight loss, recurrent vomiting, dysphagia, evidence of bleeding, anemia.

POTENTIAL HARMS

The risk of upper endoscopic complications reported in the literature is very low, varying between 1 in 330 to 1 in 2700. Cardiopulmonary complications are most common, varying from 1/690 and 1/2600, followed by perforation (1/900 to 1/4200) and bleeding (1/3400 to 1/10,000). Deaths due to upper endoscopy occur with a rate ranging from 1/3300 to 1/40,000. There has been a trend for complication rates to fall with time; the lowest figures have been reported most recently. Moreover, the above mentionned figures refer to overall rates (including therapeutic endoscopies, which account for a disproportionate proportion of the complications). Therefore, it can safely be assumed that the risk of simple diagnostic endoscopy at present corresponds to the lowest figures given here. Endoscopy is therefore a safe and accurate test.

Disadvantages of testing for H. pylori infection and treating infected cases rather than undertaking endoscopy include the following: increased levels of antibiotic resistance in the community, risk of both overtreatment because of false positive results, and undertreatment because of false-negative results, and missed diagnoses of cancer and ulcer disease.

QUALIFYING STATEMENTS

QUALIFYING STATEMENTS

1. Few randomized controlled trials exist comparing immediate investigation with empiric therapy for patients with dyspepsia.
2. It is concluded that the results of all decision analyses on management of dyspepsia critically depend on the assumptions included. Because these may not refect true clinical practice and will certainly differ from region to region, the results of the decision analyses must be viewed very cautiously.
3. In regions where there is a high background incidence of gastric cancer, a strategy of H. pylori testing and endoscopy of those who test positive for the infection (to definitely exclude malignancy) may be preferable to a test and treat strategy, although data are unavailable.

IMPLEMENTATION OF THE GUIDELINE

DESCRIPTION OF IMPLEMENTATION STRATEGY

An implementation strategy was not provided.

INSTITUTE OF MEDICINE (IOM) NATIONAL HEALTHCARE QUALITY REPORT CATEGORIES

IOM CARE NEED

Getting Better
Living with Illness

IOM DOMAIN

Effectiveness

IDENTIFYING INFORMATION AND AVAILABILITY

BIBLIOGRAPHIC SOURCE(S)

American Gastroenterological Association medical position statement: evaluation of dyspepsia. Gastroenterology 1998 Mar;114(3):579-81. [189 references] PubMed

ADAPTATION

Not applicable: The guideline was not adapted from another source.

DATE RELEASED

1997 Nov 8 (reviewed 2001)

GUIDELINE DEVELOPER(S)

American Gastroenterological Association - Medical Specialty Society

SOURCE(S) OF FUNDING

American Gastroenterological Association

GUIDELINE COMMITTEE

American Gastroenterological Association Clinical and Practice Economics Committee

COMPOSITION OF GROUP THAT AUTHORED THE GUIDELINE

Committee Members: Nicholas J. Talley; Marc D. Silverstein; Lars Agreus; Amnon Sonnenberg; Gerald Holtmann

FINANCIAL DISCLOSURES/CONFLICTS OF INTEREST

Not stated

GUIDELINE STATUS

This is the current release of the guideline.

According to the guideline developer, the Clinical Practice Committee meets 3 times a year to review all American Gastroenterological Association guidelines. This review includes new literature searches of electronic databases followed by expert committee review of new evidence that has emerged since the original publication date.

This guideline has been reviewed by the developer and is still considered to be current as of Dec 2001.

GUIDELINE AVAILABILITY

Electronic copies: Not available at this time.

Print copies: Available from American Gastroenterological Association, 4930 Del Ray Avenue, Bethesda, MD 20814.

AVAILABILITY OF COMPANION DOCUMENTS

The following is available:

- Talley NJ, Silverstein MD, Agreus L, Nyren O, Sonnenberg A, Holtmann G. AGA technical review: evaluation of dyspepsia. Gastroenterology 1998 Mar;114(3):582-595 [160 references].

Print copies: Available from American Gastroenterological Association, 4930 Del Ray Avenue, Bethesda, MD 20814.

NGC STATUS

This summary was completed by ECRI on September 1, 1998. It was verified by the guideline developer on December 1, 1998.

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